NOAA Technical Report NMFS 62

December 1987

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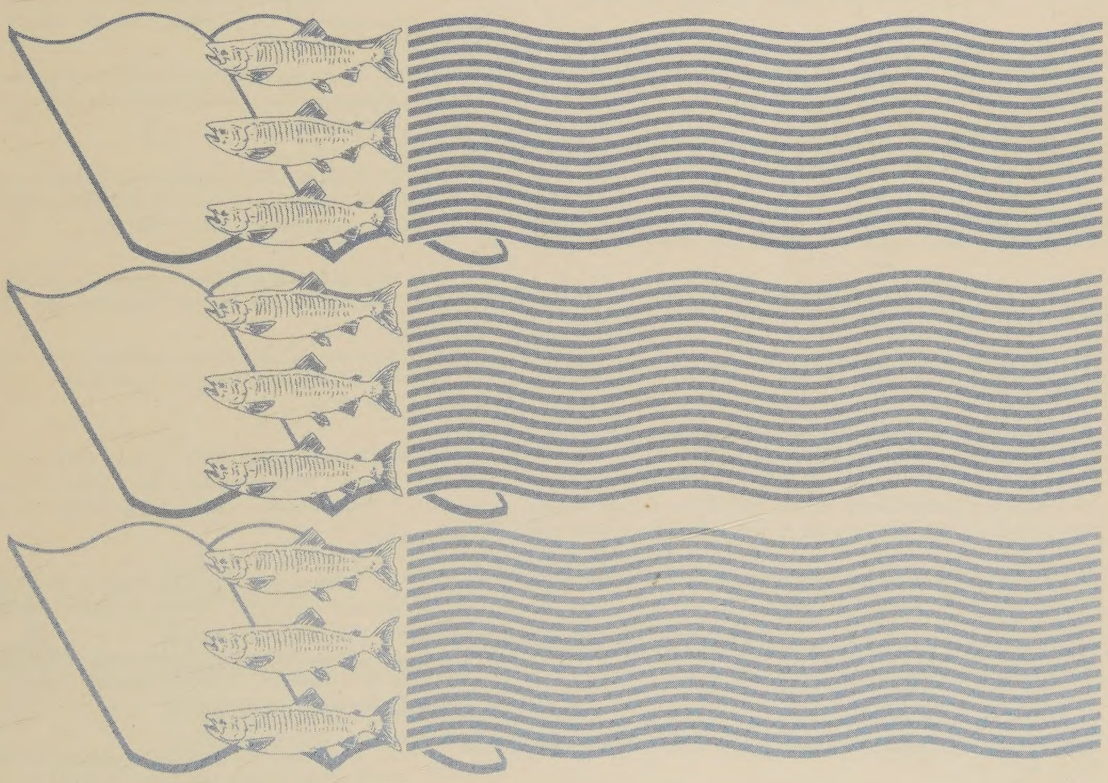

U.S. DEPARTMENT OF COMMERCE
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NOAA TECHNICAL REPORT NMFS

The major responsibilities of the National Marine Fisheries Service (NMFS) are to monitor and assess the abundance and geographic distribution of fishery resources, to understand and predict fluctuations in the quantity and distribution of these resources, and to establish levels for their optimum use. NMFS is also charged with the development and implementation of policies for managing national fishing grounds, development and enforcement of domestic fisheries regulations, surveillance of foreign fishing off United States coastal waters, and the development and enforcement of international fishery agreements and policies. NMFS also assists the fishing industry through marketing service and economic analysis programs, and mortgage insurance and vessel construction subsidies. It collects, analyzes, and publishes statistics on various phases of the industry.

The NOAA Technical Report NMFS series was established in 1983 to replace two subcategories of the Technical Reports series: "Special Scientific Report—Fisheries" and "Circular." The series contains the following types of reports: Scientific investigations that document long-term continuing programs of NMFS; intensive scientific reports on studies of restricted scope; papers on applied fishery problems; technical reports of general interest intended to aid conservation and management; reports that review in considerable detail and at a high technical level certain broad areas of research; and technical papers originating in economics studies and from management investigations. Since this is a formal series, all submitted papers receive peer review and those accepted receive professional editing before publication.

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13. Guidelines for reducing porpoise mortality in tuna purse seining, by James M. Coe, David B. Holts, and Richard W. Butler. September 1984, 16 p.

14. Synopsis of biological data on shortnose sturgeon, *Acipenser brevirostrum* LeSueur 1818, by Michael J. Dadswell, Bruce D. Taubert, Thomas S. Squiers, Donald Marchette, and Jack Buckley. October 1984, 45 p.

15. Chaetognatha of the Caribbean sea and adjacent areas, by Harding B. Michel. October 1984, 33 p.

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19. Synopsis of biological data on spottail pinfish, *Diplodus holbrooki* (Pisces: Sparidae), by George H. Darcy. January 1985, 11 p.

20. Ichthyoplankton of the Continental Shelf near Kodiak Island, Alaska, by Arthur W. Kendall, Jr., and Jean R. Dunn. January 1985, 89 p.

21. Annotated bibliography on hypoxia and its effects on marine life, with emphasis on the Gulf of Mexico, by Maurice L. Renaud. February 1985, 9 p.

22. Congrid eels of the eastern Pacific and key to their Leptocephali, by Solomon N. Raju. February 1985, 19 p.

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26. Synopsis of biological data on the sand perch, *Diplectrum formosum* (Pisces: Serranidae), by George H. Darcy. March 1985, 21 p.

27. Proceedings of the Eleventh U.S.-Japan Meeting on Aquaculture, Salmon Enhancement, Tokyo, Japan, October 19-20, 1982, by Carl J. Sindermann (editor). March 1985, 102 p.

28. Review of geographical stocks of tropical dolphins (*Stenella* spp. and *Delphinus delphis*) in the eastern Pacific, by William F. Perrin, Michael D. Scott, G. Jay Walker, and Virginia L. Cass. March 1985, 28 p.

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30. Synopsis of biological data on the pink shrimp, *Pandalus borealis* Krøyer, 1838, by Sandra E. Shumway, Herbert C. Perkins, Daniel F. Schick, and Alden P. Stickney. May 1985, 57 p.

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31. Shark catches from selected fisheries off the U.S. east coast, by Emory D. Anderson, John G. Casey, John J. Hoey, and W. N. Witzell. July 1985, 22 p.

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33. Marine flora and fauna of the Northeastern United States. Echinodermata: Echinoidea, by D. Keith Serafy and F. Julian Fell. September 1985, 27 p.

34. Additions to a revision of the shark genus *Carcharhinus*: Synonymy of *Aprionodon* and *Hypoprion*, and description of a new species of *Carcharhinus* (Carcharhinidae), by J. A. F. Garrick. November 1985, 26 p.

35. Synoptic review of the literature on the Southern oyster drill *Thais haemastoma floridana*, by Philip A. Butler. November 1985, 9 p.

36. An egg production method for estimating spawning biomass of pelagic fish: Application to the northern anchovy, *Engraulis mordax*, by Reuben Lasker (editor). December 1985, 99 p.

37. A histopathologic evaluation of gross lesions excised from commercially important North Atlantic marine fishes, by Robert A. Murchelano, Linda Despres-Patanjo, and John Ziskowski. March 1986, 14 p.

38. Fishery atlas of the northwestern Hawaiian Islands, by Richard N. Uchida and James H. Uchiyama (editors). September 1986, 142 p.

39. Survey of fish protective facilities at water withdrawal sites on the Snake and Columbia Rivers, by George A. Swan, Tommy G. Withrow, and Donn L. Park. April 1986, 34 p.

40. Potential impact of ocean thermal energy conversion (OTEC) on fisheries, by Edward P. Myers, Donald E. Hoss, Walter M. Matsumoto, David S. Peters, Michael P. Seki, Richard N. Uchida, John D. Ditmars, and Robert A. Paddock. June 1986, 33 p.

41. A stationary visual census technique for quantitatively assessing community structure of coral reef fishes, by James A. Bohnsack and Scott P. Bannerot. July 1986, 15 p.

42. Effects of temperature on the biology of the northern shrimp, *Pandalus borealis*, in the Gulf of Maine, by Spencer Apollonio, David K. Stevenson, and Earl E. Dunton, Jr. September 1986, 22 p.

43. Environment and resources of seamounts in the North Pacific, by Richard N. Uchida, Sigeiti Hayasi, and George W. Boehlert (editors). September 1986, 105 p.

44. Synopsis of biological data on the porgies, *Calamus arctifrons* and *C. proridens* (Pisces: Sparidae), by George H. Darcy. September 1986, 19 p.

45. Meristic variation in *Sebastes* (Scorpaenidae), with an analysis of character association and bilateral pattern and their significance in species separation, by Lo-chai Chen. September 1986, 17 p.

46. Distribution and relative abundance of pelagic nonsalmonid nekton off Oregon and Washington 1979-84, by Richard D. Brodeur and William G. Pearcy. December 1986, 85 p.

NOAA Technical Report NMFS 62

Fishery Publication Index, 1980-85
Technical Memoradum Index, 1972-85

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December 1987

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Fisheries Publication Index, 1980-85 Technical Memoradum Index, 1972-85

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ABSTRACT

The following series of fishery publications produced in calendar years 1980-85 by the Scientific Publications Office of the National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), are listed numerically and indexed by author and subject: *Circular*, *Fishery Bulletin*, *Marine Fisheries Review*, *Special Scientific Report—Fisheries*, and *Technical Report NMFS*. Also included is an alphanumeric listing of the *NOAA Technical Memorandum NMFS* series published in calendar years 1972-85 by NMFS regional offices and fisheries centers. Authors and subjects for the Memoradum series are indexed with the other publication series.

INTRODUCTION

This index includes those publication series produced by the Scientific Publications Office of the National Marine Fisheries Service, NOAA, and issued from 1980 through 1985. It also includes the first complete listing of the NOAA Technical Memorandum NMFS Series issued by NMFS regional offices, laboratories, and fisheries centers from 1972 to 1985. The index includes a list of each publication series in numerical order and alphabetical indexes of authors and subjects.

This index is a continuation of the following: *Fishery Publication Index, 1975-79*, NOAA Technical Report NMFS Circular 437; *Fishery Publication Index, 1965-74*, NOAA Technical Report NMFS Circular 400; *Fishery Publication Index 1955-64*, U.S. Fish and Wildlife Service Circular 296; *Fishery Publication Index 1920-54*, U.S. Fish and Wildlife Service Circular 36; and *Publications of the United States Bureau of Fisheries 1871-1940*, U.S. Fish and Wildlife Service Special Scientific Report—Fisheries 284.

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Circular

The *Circular* series continues a series begun in 1941 and includes semitechnical publications of general and regional interest intended to aid conservation and management. In 1983 this subcategory of technical reports was merged with the *Special Scientific Report—Fisheries* series into the *NOAA Technical Report NMFS* series; *Circular* 451 was the last one issued.

430 Guide to identification of some sculpin (Cottidae) larvae from marine and brackish waters off Oregon and adjacent areas in the northeast Pacific, by **Sally L. Richardson and Betsy B. Washington**. January 1980, 56 p.

431 Guide to some trawl-caught marine fishes from Maine to Cape Hatteras, North Carolina, by **Donald D. Flescher**. March 1980, 34 p.

432 Synopsis of biological data on bonitos of the genus *Sarda*, by **Howard O. Yoshida**. May 1980, 50 p.

433 Synopsis of biological data on striped bass, *Morone saxatilis* (Walbaum), by **Eileen M. Setzler, Walter R. Boynton, Kathryn V. Wood, Henry H. Zion, Lawrence Lubbers, Nancy K. Mountford, Phyllis Frere, Luther Tucker, and Joseph A. Mihursky**. June 1980, 69 p.

434 Osteology, phylogeny, and higher classification of the fishes of the order Plectognathi (Tetraodontiformes), by **James C. Tyler**. October 1980, 422 p.

435 Field guide to fishes commonly taken in longline operations in the western north Atlantic Ocean, by **Joseph L. Russo**. January 1981, 51 p.

436 Synopsis of biological data on frigate tuna, *Auxis thazard*, and bullet tuna, *A. rochei*, by **Richard N. Uchida**. January 1981, 63 p.

437 Fishery Publications Index, 1975-79, by **Lee C. Thorson**. May 1981, 117 p.

438 Marine flora and fauna of the northeastern United States. Scleractinia, by **Stephen D. Cairns**. July 1981, 15 p.

439 Marine flora and fauna of the northeastern United States. Protozoa: Sarcodina: Benthic Foraminifera, by **Ruth Todd and Doris Low**. June 1981, 51 p.

440 Marine flora and fauna of the northeastern United States. Turbellaria: Acoela and Nemertodermatida, by **Louise F. Bush**. July 1981, 71 p.

441 Synopsis of the biology of the swordfish, *Xiphias gladius* Linnaeus, by **B. J. Palko, G. L. Beardsley, and W. J. Richards**. November 1981, 21 p.

442 Proceedings of the sixth U.S.-Japan meeting on aquaculture, Santa Barbara, California, August 27-28, 1977, by **Carl J. Sindermann** (editor). March 1982, 66 p.

- 1-5 Information on the culture of phytoplankton for aquacultural needs in Japan, by **Yunosuke Saito**.
- 7-12 Recent problems of nori (*Porphyra* spp.) culture in Japan, by **Hitoshi Kito**.
- 13-17 The present status of brown algae culture in Japan, by **Yunosuke Saito**.
- 19-24 The use of phytoplankton for aquaculture needs—a status report, by **William N. Shaw**.
- 25-66 Seaweed cultivation: A review, by **Arthur C. Mathieson**.

443 Synopsis of the biological data on dolphin-fishes, *Coryphaena hippurus* Linnaeus and *Coryphaena equiselis* Linnaeus, by **Barbara Jayne Palko, Grant L. Beardsley, and William J. Richards**. April 1982, 28 p.

444 Whales, dolphins, and porpoises of the eastern North Pacific and adjacent Arctic waters, a guide to their identification, by **Stephen Leatherwood, Randall R. Reeves, William F. Perrin, and William E. Evans**, with Appendix A on Tagging by **Larry Hobbs**. July 1982, 245 p.

445 Sharks of the genus *Carcharhinus*, by **J. A. F. Garrick**. May 1982, 194 p.

446 Marine flora and fauna of the northeastern United States. Lichens (Ascomycetes) of the intertidal region, by **Ronald M. Taylor**. August 1982, 26 p.

447 Proceedings of the eighth U.S.-Japan meeting on aquaculture at Bellingham, Washington, October 17-18, 1979, Under the Aquaculture Panel, U.S.-Japan Cooperative Program in Natural Resources (UJNR), by **William N. Shaw** (editor). November 1982, 25 p.

- 1 Joint statement of the UJNR Aquaculture Panel, October 18, 1979, Bellingham, Washington, by **William N. Shaw and Shigekatsu Sato**.
- 3-5 Freshwater finfish culture in Japan, by **Shigeru Arai**.
- 7-13 Freshwater development and smoltification in coho salmon from the Columbia River, by **Leroy C. Folmar, Walton W. Dickhoff, Waldo S. Zaugg, and Conrad V. W. Mahnken**.
- 15-19 The use of soybean meal in trout and salmon diets, by **Ronald W. Hardy**.
- 21-22 Freshwater aspects of anadromous salmonid enhancement, by **Rowan W. Gould**.
- 23-25 Catfish aquaculture in the United States, by **Harry K. Dupree**.

448 Synopsis of biological data on the grunts *Haemulon aurolineatum* and *H. plumieri* (Pisces: Haemulidae), by **George H. Darcy**. February 1983, 37 p.

449 Synopsis of biological data on the pigfish, *Orthopristis chrysoptera* (Pisces: Haemulidae), by **George H. Darcy**. March 1983, 23 p.

450 The utility of developmental osteology in taxonomic and systematic studies of teleost larvae: A review, by **Jean R. Dunn**. June 1983, 19 p.

451 Synopsis of biological data on skipjack tuna, *Katsuwonus pelamis*, by **Walter M. Matsumoto, Robert A. Skillman, and Andrew E. Dizon**. January 1984, 92 p.

The *Fishery Bulletin* contains original research reports and technical notes on investigations in fishery science, engineering, and economics. First established as the *Bulletin of the U.S. Fish Commission* in 1881, this series became the *Bulletin of the Bureau of Fisheries* in 1904 and the *Fishery Bulletin of the Fish and Wildlife Service* in 1941. Separates were issued as documents through volume 46; beginning with volume 47 in 1931 and continuing through volume 62 in 1963, each separate appeared as a numbered bulletin. Starting with volume 63 in 1963, papers were bound together in a single issue of the bulletin instead of being issued individually. In January 1972, beginning with volume 70, number 1, the *Fishery Bulletin* became a periodical, issued quarterly.

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1-12 Life history patterns in marine fishes and their consequences for fisheries management, by **Peter B. Adams**.

13-34 Species of *Munidopsis* (Crustacea, Galatheidae) occurring off Oregon and in adjacent waters, by **Julie W. Ambler**.

35-50 Using Markov decision models and related techniques for purposes other than simple optimization: Analyzing the consequences of policy alternatives on the management of salmon runs, by **Roy Mendelssohn**.

51-58 Organochlorine residues in fishes from the northwest Atlantic Ocean and Gulf of Mexico, by **Virginia F. Stout**.

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185-190 Influence of Little Goose Dam on upstream movements of adult chinook salmon, *Oncorhynchus tshawytscha*, by **James M. Haynes and Robert H. Gray**.

190-195 Maturity, spawning, and fecundity of Atlantic croaker, *Micropogonias undulatus*, occurring north of Cape Hatteras, North Carolina, by **Wallace W. Morse**.

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455-464 Daily time of spawning of 12 fishes in the Peconic Bays, New York, by **Steven P. Ferraro**.

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544-549 Food of the harbor seal, *Phoca vitulina richardsi*, in the Gulf of Alaska, by **Kenneth W. Pitcher**.

549-554 Production and growth of subyearling coho salmon, *Oncorhychus kisutch*, chinook salmon, *Oncorhynchus tshawytscha*, and steelhead, *Salmo gairdneri*, in Orwell Brook, tributary of Salmon River, New York, by **James H. Johnson**.

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555-578 A multistage recruitment process in laboratory fish populations: Implications for models of fish population dynamics, by **David G. Hankin**.

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593-601 Occurrence, movements, and distribution of bottlenose dolphin, *Tursiops truncatus*, in southern Texas, by **Susan H. Shane**.

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685-692 Changes in body measurements of larval northern anchovy, *Engraulis mordax*, and other fishes due to handling and preservation, by **Gail H. Theilacker**.

693-700 Aspects of larval ecology of *Squilla empusa* (Crustacea, Stomatopoda) in Chesapeake Bay, by **Steven G. Morgan**.

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741-757 Oxygen consumption and hemolymph osmolality of brown shrimp, *Penaeus aztecus*, by **James M. Bishop, James G. Gosselink, and James H. Stone**.

759-770 Diel and seasonal variation in abundance and diversity of shallow-water fish populations in Morro Bay, California, by **Michael H. Horn**.

771-780 Movements of tagged American lobster, *Homarus americanus*, off Rhode Island, by **Michael J. Fogarty, David V. D. Borden, and Howard J. Russell**.

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